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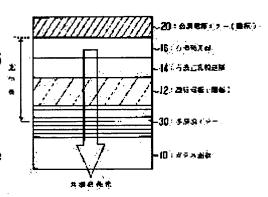
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## (54) OPTICAL RESONANCE TYPE ORGANIC ELECTROLUMINESCENCE **ELEMENT**

(57)Abstract:

PROBLEM TO BE SOLVED: To enhance the reliability of an organic EL element.

SOLUTION: A multilayer film mirror 30, a transparent electrode 12, a positive hole transport layer 14 and a luminescent layer 16 forming an organic layer, and a metal electrode mirror 20 are provided on a glass substrate 10, and a specified wavelength in luminescent light is strengthened by a minute optical resonator composed of the multilayer film mirror 30 and the metal electrode mirror 20. The optical length L of the minute optical resonator is set to be two times of a



resonance wavelength, and the thickness of the organic layer is set to be 100 nm or more, the thickness of a transparent electrode, 50 nm or more, or the sheet resistance of the transparent, 30  $\Omega$ /square or less. Thereby, the heat generation of the transparent electrode is prevented when a heavy current is caused to flow, and the degradation of element characteristics can be surely prevented. The thickness of the organic layer containing the luminescent layer becomes sufficiently thick, the reliability of the element is enhanced in this point also.

## **LEGAL STATUS**

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